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The great misunderstanding of the global food crisis

Philipp Aerni



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Agricultural productivity growth rates in Africa have lagged behind the rest of the world due to lack of investment in agriculture in general and in agricultural research and development (R&D) in particular.^{1,2} Low productivity has especially affected basic African food crops such as sorghum, millet, cassava, sweet potato and cowpea, which are barely traded internationally and which benefited very little from the advances in plant breeding of the Green Revolution.³ But it is not just African crops that have been overlooked; African livestock and aquaculture have also suffered benign neglect, and their potential remains largely underexploited.

Global commodity markets do not reach the rural poor, who largely live from non-tradeable subsistence crops.

Lack of investment in agriculture largely accounts for the fact that nearly 850 million people, most of them living in South Asia and Sub-Saharan Africa, were suffering from hunger and malnutrition even before the global food crisis in 2008.⁴

How is it then possible that hardly anyone was calling it a crisis before the globally traded food commodity prices peaked in 2008 and put an additional 50 million people at risk? There are two main reasons: first of all, the newly vulnerable people were mostly part of formal urban economies and therefore depended to a great extent on the purchase of food products that are traded internationally. Thus they suffered most from the price peaks on the global commodity markets. Fortunately, they were also in a better position to mobilise public protest and put pressure on governments than their countrymen in rural areas. Second, it is the persistent narrative in affluent countries – which states that food insecurity in the least developed countries is a consequence of technological change induced through agricultural modernisation and liberalisation – that may have made the mass media less inclined to call the situation a crisis prior to price peaks in 2008. Global change in agriculture, so

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the narrative goes, could destroy traditional sustainable small-scale farming systems and thus undermine food sovereignty.

This view is not just highly popular among food sovereignty advocates, but also among politicians – as well as corporate sustainability and development experts in donor countries – who seek to win favour with their voters, customers and taxpayers. The narrative is, however, hardly compatible with the fact that

the global commodity markets do not even reach the rural poor, who largely live from non-tradeable subsistence crops.⁵

The causes of the food crisis in 2008

There are numerous short-term factors that contributed to the global price peaks of food commodities in 2008 – and one important long-term trend: the growing mismatch between global demand and global supply of tradeable food products. While the demand for more (higher average calorie intake) and better (more animal-based proteins) food grew rapidly, mainly due to emerging middle classes in Asia, productivity growth rates in agriculture decreased over the previous two decades, mainly due to a general drop in public investment in agricultural R&D. When this trend was confronted with harvest failures in major exporting countries and other supply shocks in 2008, price increases escalated to a level that had not been seen since the oil crisis in the 1970s.

Understanding the situation in 2014

Even though the global situation improved following another peak in food prices in 2011, the increase in global stocks and the globally traded food supply has largely been achieved through a massive expansion of land under cultivation by large corporate and sovereign investment funds. This is not sustainable because colonising new land often takes place at the expense of forests and other precious ecosystems, and it does nothing to address the challenges of the informal rural population who already suffered from hunger and malnutrition even before the global food crisis. More helpful would be international and domestic institutional reforms that encourage home-grown agricultural innovation, rural off-farm employment and structural change. This would enable poor rural people to move out of precarious semi-subsistence farming by becoming productive farmers who supply the growing formal markets or by finding work in the growing formal manufacturing or service economy.

As was the case in Europe in the 19th century, poor African farm households today are characterised by a large number of offspring and ever-shrinking parcels of arable land. The average farm size in poor rural areas of Eastern Africa tends to be around 0.4 hectares, and the average productivity of these farms is in decline. Despite numerous efforts to make low-input agricultural systems more sustainable, small-scale farming has become a big environmental problem due to deforestation, soil-nutrient deficiency, soil erosion and water contamination. It is therefore not surprising that most of these small farms are unable to survive without having at least one family member lucky enough to find off-farm employment in a city nearby, or without counting on the assistance of charities and foreign non-governmental organisations (NGOs). These are clear indications that informal traditional economies characterised by low-input semi-subsistence farming and pastoralism are becoming unsustainable from an economic, social and environmental point of view.⁶

This insight stands in strong contrast to the attention that many foreign donor agencies, international organisations and NGOs give to the protection and preservation of low-input small-scale farming in Africa, which they tend to consider as a freely chosen lifestyle rather than an unfortunate destiny, as the increasingly educated offspring of these poor farm households see it. Small-scale farming as a sort of idealistic pursuit of life in harmony with nature and traditional culture is a persistent attitude in affluent non-farming societies, one which explains the willingness of taxpayers to support costly agricultural subsidies and trade protection. Since overseas development assistance and foreign NGOs must primarily please taxpayers and donors back home, it is quite clear from a political economy point of view that pleasing the stereotypical views in donor countries matters more than effectively addressing the agricultural challenges in recipient countries.⁷

Food sovereignty: a persistent narrative that shapes donor priorities

The persistent narrative in affluent donor countries on the global food crisis starts with identification of the supposed culprit. According to many popular documentary movies and even the Special UN Rapporteur on the Human Right to Food (a lawyer by training), the source of all evil is the “neo-liberal” global food system that disenfranchises consumers and producers of food in developed and developing countries alike for the sake of corporate profits. The proposed alternative to this evil system is provided by the popular concept of food sovereignty, which would embrace “the right of people to choose their own food system”. Food sovereignty activists in affluent countries are, however, reluctant to stand back and let governments choose what kind of agricultural policies they think might work best in view of the socio-economic and biophysical constraints their country faces. Instead they reveal a surprisingly missionary zeal to persuade governments in developing countries that there is only one good choice, namely shunning agricultural trade, pursuing agro-ecological approaches without the use of the modern tools of biotechnology, and focusing on the improvement of informal small-scale farming. In essence, they radically simplify the complex challenge of making agriculture work for development by proposing a dualistic world view that promises a sustainable and equitable world for everyone, if “the right path” is chosen.

The patronising attitude of the food sovereignty movement is well disguised in an anti-imperialist language. For example, by sponsoring local activist groups in developing countries that fight agricultural trade and foreign investment in agriculture, the call for food sovereignty could be framed as an expression of

The affluent urban elites have developed a purist ethic which considers all things that have been imported to be a source of contamination of local culture and the environment.

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cultural self-defence. This helps to explain why the food sovereignty movement proved to be as popular on the far political right (for example nationalist concerns about potential dependence on agricultural imports) as it is on the far political left (rejection of agricultural modernisation as a Western project). Both sides belong to affluent urban elites who have developed a purist ethic which considers all things that have been

imported to be a source of contamination of local culture and the environment. Ironically, they themselves are a product of globalisation and most of the things they eat stem from global industrial agriculture, including the organic agriculture industry.

The political alliances that have merged under the umbrella of food sovereignty have made the intergovernmental IAASTD Report⁸ (International Assessment of Agricultural Knowledge, Science and Technology for Development) their flagship report, partially sponsored by the World Bank. The report was criticised for being unbalanced⁹ and for not making the politics of knowledge more explicit, and particularly came under fire for its claim that NGOs represent local farmers in developing countries.¹⁰

Yet, the popularity of the report in the Western mass media made even pragmatic politicians realise that rejecting the use of genetic modification and supporting small-scale organic farming initiatives at home and abroad is a cheap vote winner. It also felt good to affluent urban consumers who consider sustainability to be a lifestyle that contributes to personal wellness. “Wellness sustainability” is about feeling right with regard to what we eat, say, read or

think. Clever marketing strategies by global retailers are increasingly focused on selling goodness rather than just goods, ensuring that we are never exposed to contradictions that could make shopping a less pleasant and reassuring experience.¹¹

“Wellness sustainability” is about feeling right with regard to what we eat, say, read or think.

Unfortunately, wellness sustainability has caused considerable collateral damage in many countries in Sub-Saharan Africa. For example, thanks to the fact that Europe is the largest donor to Africa as well as the largest importer of food from Africa, it has considerable clout in imposing its views on the continent’s governmental and non-governmental organisations. The result is that institutional capacity development of national agricultural innovation systems has been further neglected; highly needed public-private partnerships to increase food production in a sustainable way are hardly encouraged; the use of modern biotechnology in agriculture remains a taboo for many African governments; and off-farm employment in poor rural areas is generated not by a flourishing private sector but thanks to the proliferation of public-sector bodies and foreign NGOs.

European aid must surely have met some important needs among the poor of Africa, and it may almost unintentionally generate a lot of local businesses that sell goods and services to these institutions with high purchasing power. But is all this financially sustainable? And does it help improve food security on the continent in the long run? Probably not, because everything stands and falls on the strong presence and funding of these external actors. The trend is also contrary to the spirit of the Paris Declaration on Aid Effectiveness, which was jointly signed in 2005 by members of the Organisation for Economic Co-operation and Development – the OECD.¹² They agreed that priorities with regard to food security and agricultural policies should be set by the

respective governments in recipient countries and that donors should then align their funding accordingly. A recent needs assessment on capacity development for agricultural innovation in Africa⁶ revealed that most local stakeholders think that foreign aid is not really aligned with the principles of the Africa-led Comprehensive African Agricultural Development Programme (CAADP), which focuses on the revival of domestic agriculture through the mobilisation of investment, research, entrepreneurship and innovation for agricultural development.

Collaboration as an engine of sustainable change in agriculture

Whereas the food sovereignty movement has a strong presence in the Western media and considerable influence on policy making in donor countries, it is South-South and triangular (South-North-South) cooperation that is currently transforming agriculture in Africa. South-South is mainly associated with the increasing presence of China in Africa and viewed with great skepticism. However, there are strong indications that China will be able to make a big difference in Africa in terms of poverty reduction and economic development – judging from its own success story back home. China's poverty incidence decreased from 31 per cent in 1978 to just 2.5 per cent in 2008. During this period income per farm household increased on average by 7 per cent per year.¹³

Food security and rural empowerment require collaboration and enhanced involvement of public- and private-sector institutions that jointly create an enabling environment.

The advantage of China is that its people still remember how they developed. They know that it was the political will to enact and enforce institutional change that ultimately strengthened capacities in agricultural innovation, improved the transmission of new knowledge from research to teaching at universities and from agricultural service

providers to farmer cooperatives and agri-businesses. This resulted in the creation, tailoring and rapid adoption of innovation in management and technology. The resulting process of endogenous development contributed significantly to the reduction of poverty in rural areas, enabled rural empowerment and led to an increase in agricultural productivity and competitiveness. Moreover, unlike governments in OECD countries that allowed their budgets for agricultural research to shrink substantially after the end of the Cold War, China strongly increased public-sector R&D in agricultural as well as agricultural biotechnology research.¹⁴ The same trends can be observed in tropical emerging economies such as Brazil, where the research organisation EMBRAPA has become the global leader in agricultural R&D with a focus not just on the improvement of cash crops but also of basic food crops that are relevant to Africa.

South-South collaboration alone will, however, barely be able to facilitate sustainable agricultural change through institutional reform, entrepreneurship and innovation in Sub-Saharan Africa.¹⁵ That also requires support from the North through selected partnerships with leading research institutes, foundations, agri-business companies and progressive NGOs. Such types of triangular partnerships are focused primarily on institutional capacity development for agricultural innovation. As such, they also help to make national agricultural innovation systems more business- and innovation-oriented. All this contributes to endogenous development in rural areas, a process that is strongly endorsed by the G20 Interagency Report¹⁶ as well as the African Union (AU) and the New Partnership for African Development (NEPAD).¹⁷

Behind these initiatives is the belief that food security and rural empowerment require collaboration and

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enhanced involvement of public- and private-sector institutions that jointly create an enabling environment for the mobilisation of science and technology for development. Actors in the public and the private sectors may pursue different interests, but it is their specific expertise that produces synergies which neither of them could achieve on their own. This is vastly different from the food sovereignty movement and its dualistic approach, as it tends to abstain from collaboration with the private sector unless its potential partners appear like-minded.

It is therefore time to agree that building bridges is more conducive to sustainable agriculture than burning bridges. If leading advocates of the food sovereignty movement could see this – realising that the private sector is not just about the large multinational corporation but also the local entrepreneur in Africa who wants to grow through innovation – it will be a huge step towards a comprehensive, sustainable and holistic approach to rural development.

References

- 1 World Development Report (2008) *Agriculture for Development*. The World Bank, Washington DC.
- 2 Juma, C. (2011) *New Harvest: Agricultural Innovation in Africa*. Oxford University Press, New York.
- 3 Aerni, P. (2006a) Mobilizing science and technology for development: The case of the Cassava Biotechnology Network (CBN). *AgBioForum* 9(1): 1–14.
- 4 State of Food and Agriculture Report (SOFA) (2006) *Food Aid for Food Security?* FAO, Rome.
- 5 Aerni, P. (2013) *Assessment of the Current Capacities and Needs for Capacity Development in Agricultural Innovation Systems in Low Income Tropical Countries*. Synthesis Report for the Tropical Agriculture Platform. FAO, Rome. www.tropagplatform.org.

- 6 Ojijo, N.K.O., Jakinda, D.O., Annor-Frempong, I. (2013) *Assessment of Current Capacities and Needs For Institutional and Individual Capacity Development in Agricultural Innovation Systems*. Regional Synthesis Report for Africa. FARA, Accra, Ghana. (www.tropagplatform.org)
- 7 Aerni, P. (2006b) The principal-agent problem in international development assistance and its impact on local entrepreneurship in Africa: time for new approaches. *ATDF Journal* 3(2): 27–33.
- 8 *International Assessment on Agricultural Science and Technology for Development* (IAASTD) (2008) <http://www.agassessment.org/>
- 9 *Nature* 2008. Deserting the hungry? 451: 223–4.
- 10 Scoones, I. 2009. The politics of global assessments: the case of the *International Assessment of Agricultural Knowledge, Science and Technology for Development* (IAASTD). *The Journal of Peasant Studies* 36 (3): 547–571.
- 11 Aerni, P. (2011) Food sovereignty and its discontents. *ATDF Journal* 8(1/2): 23–40.
- 12 www.oecd.org/dac/effectiveness/parisdeclarationandaccraagendaforaction.htm
- 13 OECD (2010) *Agriculture, Food Security and Rural Development for Growth and Poverty Reduction: China's Agricultural Transformation – Lessons for Africa and its Development Partners*. Summary of Discussions by the China-DAC Study Group, Bamako, Mali.
- 14 Liu, F.C., Simon, D.F., Sun, Y.T., Cao, C. (2011) China's innovation policies: evolution, institutional structure, and trajectory. *Research Policy* 40(7): 917–931.
- 15 Scoones, I., Cabral, L., Tugendhat, H. (2013) New development encounters: China and Brazil in African agriculture. *IDS Bulletin* 44(4) July 2013 (<http://onlinelibrary.wiley.com/doi/10.1111/1759-5436.12038/pdf>)
- 16 Interagency Report to the Mexican G20 Presidency (2012) *Sustainable Agricultural Productivity Growth and Bridging the GAP for Small Family Farms*. Co-ordinated by the FAO and the OECD in a collaborative undertaking with Bioversity, CGIAR Consortium, IFAD, IFPRI, IICA, UNCTAD, Coordination team of UN High Level Task Force on the Food Security Crisis, WFP, World Bank, and WTO. FAO, Rome.
- 17 Comprehensive African Agricultural Development Plan (CAADP) (2012) *From Technology Transfer to Innovation Systems: Sustaining a Green Revolution in Africa*. CAADP Policy Brief 07, March 2012 (<http://www.future-agricultures.org/>)

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